

HEINRICH GERS-BARLAG ET AL.
USSN 08/987,468
REPLY TO THE OFFICE ACTION DATED APRIL 8, 2003
AMENDMENT OF December 29, 2003

Amendments to the Claims:

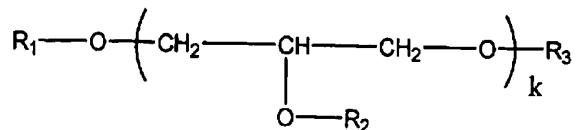
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-30. (Canceled)

31. (New) A water-resistant cosmetic or dermatological sunscreen formulation in the form of a water-in-oil emulsion (W/O), said formulation comprising the following components:

- Σ'
- a) one or more UV filter substances comprising one or more sulphonic acid groups or sulphonate groups;
- b) one or more surface active substances selected from the group consisting of surface active substances having the structural formula:



wherein

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k represents 2 to 8; and

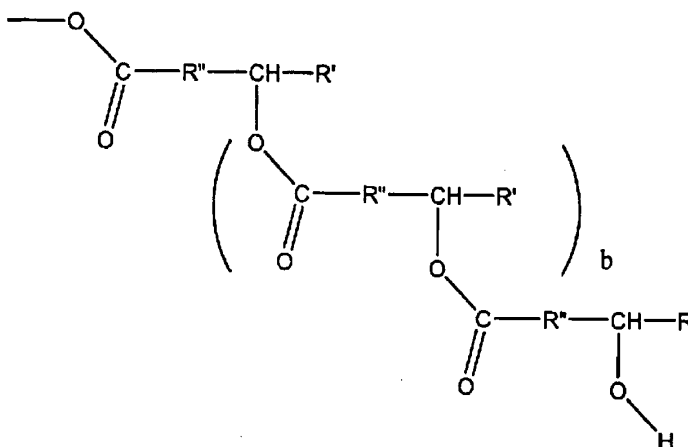
R₁, R₂ and R₃ independently represent a member selected from the
group consisting of:

- i) hydrogen, except that at least one of R₁, R₂ and R₃
must be other than hydrogen;
- ii) branched or unbranched, saturated or unsaturated
aliphatic radicals; and
- iii) branched or unbranched, saturated or unsaturated
acyl radicals, wherein the acids on which said acyl
radicals are based are independently selected from
the group consisting of:
- 1) branched or unbranched, saturated or unsaturated
aliphaticcarboxylic acids having from 8 to 24
carbon atoms, in which up to 3 aliphatic hydrogen
atoms can be substituted by hydroxyl groups; and

Σ'
cont.

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2) polyester radicals of the formula:



3
cont.

wherein

R' is selected from the group consisting of
branched and unbranched alkyl groups
having from 1 to 20 carbon atoms;

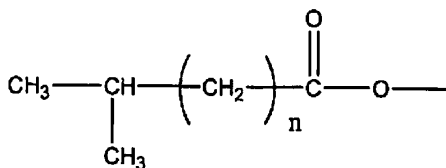
R'' is selected from the group consisting of
branched and unbranched alkylene groups
having from 1 to 20 carbon atoms; and

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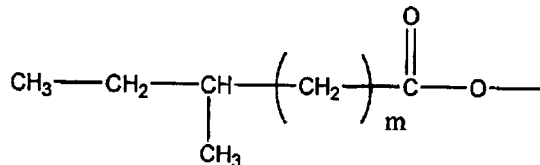
b represents 0 to 200; and

c) one or more cosmetically or pharmaceutically acceptable
superficially hydrophobic inorganic pigments.

32. (New) The water-resistant cosmetic or dermatological sunscreen formulation according to claim 31, wherein R₁, R₂ and R₃ independently represent a member selected from the group consisting of hydrogen, methyl, ethyl, propyl, isopropyl, myristoyl, palmitoyl, stearyl, eicosoyl, compounds of the formula:



wherein n is from 10 to 20, and compounds of the formula:



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wherein m is from 9 to 19.

33. (New) The water-resistant cosmetic or dermatological sunscreen formulation according to claim 32, wherein at least one of R_1 , R_2 or R_3 represents isostearyl.

34. (New) The water-resistant cosmetic or dermatological sunscreen formulation according to claim 31, wherein component b) is selected from the group consisting of polyglyceryl-4 isostearate, polyglyceryl-3 diisostearate, polyglyceryl-2 sesquiisostearate and polyglyceryl-2 polyhydroxystearate.

35. (New) (New) The water-resistant cosmetic or dermatological sunscreen formulation according to claim 34, wherein component b) is polyglyceryl-4 isostearate.

36. (New) The water-resistant cosmetic or dermatological sunscreen formulation according to claim 31, wherein component b) is present in said formulation in a concentration of 0.005 to 50% by weight based on the total weight of the formulation.

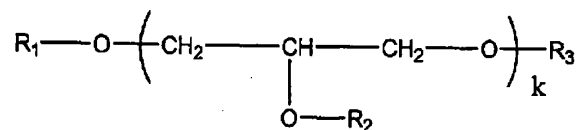
37. (New) The water-resistant cosmetic or dermatological sunscreen formulation according to claim 36, wherein component b) is present in said formulation in a concentration of 0.5 to 10% by weight based on the total weight of the formulation.

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38. (New) The water-resistant cosmetic or dermatological sunscreen formulation according to claim 37, wherein component b) is present in said formulation in a concentration of 1.0 to 5% by weight based on the total weight of the formulation.

39. (New) A method of achieving or increasing the water resistance of a cosmetic or dermatological sunscreen in the form of a water-in-oil (W/O) emulsion, said formulation comprising the following components:

39. (New)
- a) one or more UV filter substances comprising one or more sulphonic acid groups or sulphonate groups;
- b) one or more surface active substances selected from the group consisting of surface active substances having the structural formula:



wherein

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k represents 2 to 8; and

R₁, R₂ and R₃ independently represent a member selected from the
group consisting of:

i) hydrogen, except that at least one of R₁, R₂ and R₃
must be other than hydrogen;

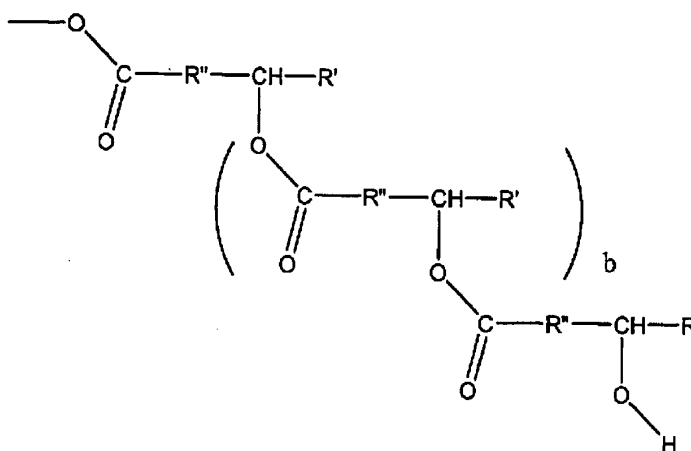
ii) branched or unbranched, saturated or unsaturated
aliphatic radicals; and

iii) branched or unbranched, saturated or unsaturated
acyl radicals, wherein the acids on which said acyl
radicals are based are independently selected from
the group consisting of:

1) branched or unbranched, saturated or unsaturated
aliphaticcarboxylic acids having from 8 to 24
carbon atoms, in which up to 3 aliphatic hydrogen
atoms can be substituted by hydroxyl groups; and

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2) polyester radicals of the formula:



Σ
 Con.

wherein

R' is selected from the group consisting of
 branched and unbranched alkyl groups
 having from 1 to 20 carbon atoms;

R'' is selected from the group consisting of
 branched and unbranched alkylene groups
 having from 1 to 20 carbon atoms; and

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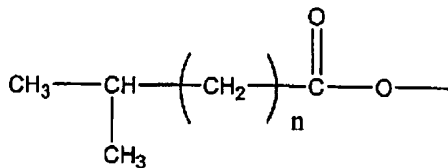
b represents 0 to 200; and

c) one or more cosmetically or pharmaceutically acceptable
superficially hydrophobic inorganic pigments;

said method comprising incorporating a superficially hydrophobic inorganic pigment into the oil
phase of said W/O emulsion.

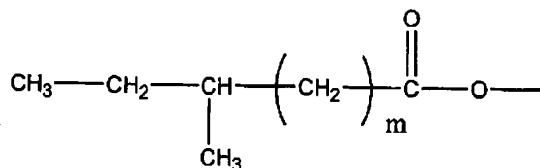
40. (New) The method according to claim 39, further comprising incorporating a
hydrophilic inorganic pigment into the water phase of said W/O emulsion.

41. (New) The method according to claim 39, wherein R₁, R₂ and R₃ independently
represent a member selected from the group consisting of hydrogen, methyl, ethyl, propyl,
isopropyl, myristoyl, palmitoyl, stearoyl, eicosoyl, compounds of the formula:



wherein n is from 10 to 20, and compounds of the formula:

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42. (New) The method according to claim 41, wherein at least one of R₁, R₂ or R₃ represents isostearoyl.

43. (New) The method according to claim 41, wherein component b) is selected from the group consisting of polyglyceryl-4 isostearate, polyglyceryl-3 diisostearate, polyglyceryl-2 sesquiosostearate and polyglyceryl-2 polyhydroxystearate.

44. (New) The method according to claim 43, wherein component b) is polyglyceryl-4 isostearate.

45. (New) The method according to claim 39, wherein component b) is present in said formulation in a concentration of 0.005 to 50% by weight based on the total weight of the formulation.

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46. (New) The method according to claim 45, wherein component b) is present in said formulation in a concentration of 0.5 to 10% by weight based on the total weight of the formulation.

47. (New) The method according to claim 46, wherein component b) is present in said formulation in a concentration of 1.0 to 5% by weight based on the total weight of the formulation.

48. A method of protecting skin from the damaging effects of sunlight, said method comprising applying to said skin an effective amount therefor of a cosmetic or dermatological formulation according to claim 31.
